



# NATIONAL WILDLIFE FEDERATION

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August 19, 2010

Mr. Ron Ellis  
Texas Commission on Environmental Quality  
P.O. Box 13087  
MC 160  
Austin, TX 78711-3087

Re: Senate Bill 3 Rulemaking; Creation of 30 Texas Administrative Code, Chapter 298,  
Environmental Flows, Subchapter A, Sabine and Neches Rivers and Sabine Lake and  
Subchapter B, Trinity and San Jacinto Rivers and Galveston Bay

Dear Mr. Ellis:

The National Wildlife Federation ("NWF") appreciates the opportunity to provide comments on this vitally important undertaking. As reflected in Senate Bill 3 and House Bill 3, the Texas Commission on Environmental Quality ("TCEQ") has been charged with moving forward on the adoption of environmental flow standards, environmental flow set-asides, and rules governing the reopener provision to allow for adjustment of permit conditions in permits issued since the effective date of that legislation. We appreciate the diligent manner in which TCEQ is going about implementing that charge and recognize that unresolved differences in the process so far have made TCEQ's task more challenging. However, it remains achievable.

As TCEQ moves forward with this rulemaking process, NWF urges staff to ensure that the rules as proposed are sufficiently broad to provide adequate notice so that changes that would increase the level of protection can be made in response to comments received during the public comment process. In other words, it is important to propose the rules in a way that does not preclude increasing the quantity or attainment frequency for any particular aspect of the proposed standards or set asides beyond the level in the proposed rules, if as a result of public comment, such an increase is determined to be appropriate.

Generally, these comments have been structured to address the questions posed in the document distributed at the August 12, 2010, public meeting.

## **Balancing**

The basic statutory directive to TCEQ is to adopt flow standards that are adequate to support a sound ecological environment. That directive is tempered by the recognition that, in some circumstances, the possibility exists that other factors, such as broader public interest considerations, could conceivably make achieving that basic directive unreasonable. In those

unusual circumstances, TCEQ is directed to adopt flow standards that come as close to supporting a sound ecological environment as is reasonable in light of those other factors. Tex. Water Code §11.1471 (a). The Water Code also establishes a mechanism for adjusting environmental flow standards over time to respond to new information about the amount needed to support a sound ecological environment or about the other factors to be considered. Tex. Water Code §11.1471 (f). In other words, the decisions made now in adopting environmental flow standards can be revisited in the future.

The National Wildlife Federation believes it would be a truly rare circumstance that would make maintaining ecologically sound streams, rivers, and estuaries unreasonable. Healthy streams, rivers, and estuaries provide tremendously important benefits to all Texans. We rely on the assimilative capacity of those waters to finish the job of wastewater treatment and a significant reduction in flows could lead to massive increases in treatment costs. Similarly, healthy rivers and associated estuaries support multi-billion dollar recreational and commercial fishing industries. In addition, river recreation and nature tourism are growing industries for many cities and counties. Beyond that, the overall health of the environment and the availability of outdoor recreational opportunities is an important factor in attracting new businesses to Texas. Accordingly, developing strong environmental flow standards is vitally important to the ecological and economic well-being of the people of Texas.

NWF does support the basic approach suggested by TCEQ staff at the August 12, 2010, public comment hearing for evaluating other factors, basically other future water projects, to consider in developing environmental flow standards. In light of the process for revising flow standards over time and the likelihood that potential water projects considered for implementation far into the future will change over time, NWF believes it is appropriate for TCEQ to use representative near-term projects to assess the implications of proposed flow standards.<sup>1</sup> However, in doing so, the potential impacts of a particular environmental flow standard on a potential new water project must be evaluated in comparison to other approaches that TCEQ has used to meet statutory provisions related to protecting environmental flows prior to the enactment of S.B. 3. It is not reasonable to assume that a project will be built without being subject to meaningful environmental flow protections. Any meaningful environmental flow protection is going to have an impact on a project. The key issue is determining what level of impact becomes unreasonable. And, if it appears that a protective environmental flow standard and a particular potential project really are incompatible, it should not be a foregone conclusion that the environmental flow standard must be adjusted. A fair balancing would also involve evaluating the potential to alter the project or the availability of alternative approaches that could meet the underlying need for water in a manner consistent with environmental flow protection.

As illustrated in Attachment 1<sup>2</sup> to this letter, a multi-faceted flow regime, such as has been proposed by one expert science team and also by other expert science team and stakeholder

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<sup>1</sup> We do note that the proposed additional yield from Lake Ray Hubbard may pose special challenges for this type of evaluation because the underlying premise, as we understand it, for the application is that the inflows supporting the new appropriation are not reflected in the WAM and are reflected only to a limited extent in the historical flow records.

<sup>2</sup> Attachment 1 is a slide taken from a presentation by Dan Opdyke, with the Texas Parks and Wildlife Department, to the Texas Environmental Flows Science Advisory Committee on June 14, 2010. This slide depicts a summary of a comparison of water available for diversion using recommendations from the two different groups within the

committee members, will not necessarily result in greater reductions in availability of water for other purposes than default approaches (Lyons and Consensus Criteria) currently in common usage. However, as indicated in the various guidance documents developed by the Texas Environmental Flows Science Advisory Committee (“SAC”), a multi-faceted flow regime is more likely to support a sound ecological environment because it seeks to maintain key functional components across an entire flow spectrum.

Despite any suggestions to the contrary, it is clear that TCEQ is directed to adopt comprehensive environmental flow standards, not just some minimum flow levels. Section 11.1471 (c) directs that the flow standards must consist of a schedule of flow quantities and must reflect both seasonal and annual fluctuations, in addition to variations based on geographical location.

There is no specific statutory definition of “sound ecological environment.” However, Texas Water Code Section 11.147 (a) does provide some guidance in stating that a sound ecological environment, in the context of freshwater inflows, would maintain the “productivity of economically important and ecologically characteristic sport or commercial fish and shellfish species and estuarine life upon which such fish and shellfish are dependent.” Thus, flow standards must, at minimum, be adequate to accomplish that goal absent a determination by TCEQ that achieving that goal is unreasonable. Consistent with the directives of Section 11.02361 (e)(2)(B), the SAC also has provided guidance on this issue. Quoting a report from an earlier Science Advisory Committee, the SAC states that a sound ecological environment is one that:

- sustains the full complement of native species in perpetuity;
- sustains key habitat features required by these species;
- retains key features of the natural flow regime required by these species to complete their life cycles; and
- sustains key ecosystem processes and services, such as elemental cycling and the productivity of important plant and animal populations.<sup>3</sup>

### **Environmental Flow Set-Asides**

Section 11.1471 (a)(2) directs TCEQ to “establish an amount of unappropriated water, if available, to be set aside to satisfy the environmental flow standards to the maximum extent reasonable when considering human water needs.” The environmental flow standards establish the over-arching criteria for environmental flow protection. Depending on individual circumstances, the volume of unappropriated water set-aside may be equal to, or less than, the volume of water included in an environmental flow standard. The volume and reliability of the set-aside will be greatly dependent on the availability of unappropriated flows in various

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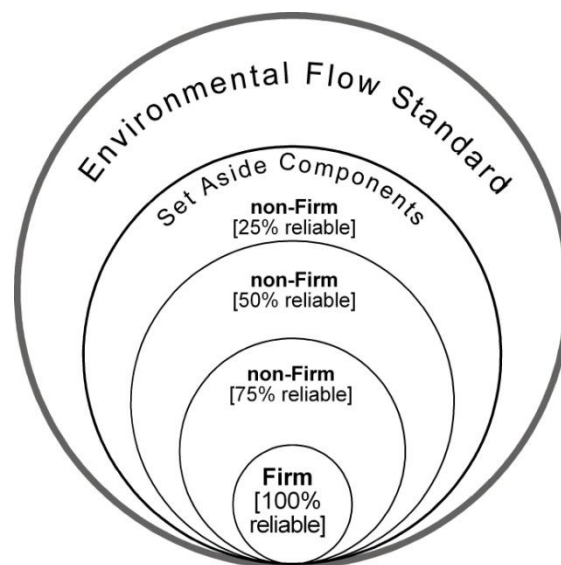
Trinity/San Jacinto/Galveston Bay BBEST, the Lyons Method, and the Consensus Criteria for Environmental Flow Needs.

<sup>3</sup> “Methodologies for Establishing a Freshwater Inflow Regime for Texas Estuaries Within the Context of the Senate Bill 3 Environmental Flows Process,” Texas Environmental Flows Science Advisory Committee, Report # SAC-2009-03, June 5, 2009, at p. 3.

locations. It is important to acknowledge that different aspects of an overall flow regime require differing levels of dependability or reliability.

For example, subsistence and baseflows recommended during dry periods need high levels of reliability such that those amounts are met all, or almost all, of the time. Accordingly, a set-aside of unappropriated flows to meet that portion of an environmental flow standard should have an associated high reliability to the full extent of the availability of the water. However, even if those components of the flow standard can't be met with high reliability with unappropriated flow, it is important to set-aside the amount that is available, even if the reliability is low. Various flow strategies, such as market approaches, can be used in the future to help supplement those flows during the dry periods when availability is low. By contrast, large pulse flows generally are understood to be needed from an ecological perspective only on a more periodic basis. Accordingly, a set-aside designed to protect those aspects of a flow standard might not require that a high level of reliability be protected, even if unappropriated water would be available on a fairly reliable basis. As a result, water would be available to be captured during those higher flow periods for future projects during the times when the flows are not needed to maintain the environmental flow functions.

The basic nature of the relationship, as we envision it, between an environmental flow standard and a set-aside, including the different levels of reliability for various aspects of a set-aside is illustrated, conceptually, in Figure 1 below. The volumes and percentages depicted there are provided solely for purposes of illustration of the concept and do not reflect any recommendation about actual quantities or levels of reliability that would be appropriate in any particular flow standard or set-aside.



*Figure 1. – Conceptual illustration of relationship between environmental flow standard and environmental flow set-aside.*

In addition to establishing the overall volume of water to be protected, the environmental flow standard describes the characteristics of the various flow components. Thus, depending on the component at issue, the standard might describe a peak flow, a duration, a volume, an attainment

frequency, or other attributes that can be used in developing permit conditions appropriate for a given new project. Those aspects also would be important for informing the design of voluntary strategies that might be pursued to supplement the unappropriated flows that are available. The set-aside, by contrast, might only define a flow volume and a reliability component.

### **Amendments**

With respect to permit amendments that do not involve new appropriations and new interbasin transfers of water pursuant to existing water rights, NWF understands that, just as was true before the passage of S.B. 3 and H.B. 3, TCEQ will have discretion, subject to the applicable provisions of Sections 11.122 and 11.085 of the Water Code, in determining the nature of the applicable environmental flow conditions. However, the environmental flow standards would provide the basic criteria to be considered in applying that discretion.

### **Permit Conditions**

In developing permit conditions, the nature of the particular project under consideration would drive the level of detail required. Thus, a new run-of-river diversion with a small diversion rate likely would only require a simple flow restriction because it is unlikely to produce a discernible effect on other aspects of the applicable flow standard and set-aside. By contrast, a new, large on-channel reservoir project likely would be subject to a more complex suite of permit conditions, but those conditions still could be simpler than the actual flow standard. The permit conditions will provide the mechanism by which TCEQ ensures that the flow standard is protected, in light of the specific characteristics, such as diversion rate or impoundment capacity, of the particular project.

### **Permit reopener and credits**

Section 11.147 (e-2) provides that a water right holder may get an appropriate credit against the reopener provision of Section 11.147 (e-1) for certain types of voluntary actions that “actually contribute” to meeting the applicable standard. Thus, for example, simply adding an environmental flow use would not qualify for credit unless the change actually contributed to meeting the standard. In addition, TCEQ is charged with determining, based on the applicable facts, the extent of the credit that is appropriate. The rules should expressly acknowledge both of those aspects of the process.

### **Ungaged Tributaries**

Narrative standards may be appropriate for ungaged tributaries. To the extent reasonable, those narrative standards likely should start with an approach to extrapolate from an appropriate nearby location for which numerical flow standards have been established. However, the nature of the particular tributary also should be taken into account. Thus, for example, the rules might provide that spring-dominated systems would have higher levels of subsistence and low baseflows than would be expected from a straight extrapolation, in order to reflect those springflow contributions. Similarly, the presence of threatened and endangered species or other special considerations should be acknowledged as a factor in such narrative standards.

Again, the National Wildlife Federation appreciates the opportunity to provide these initial comments and looks forward to further participation in this critically important process. Please contact me if you have questions or need additional information.

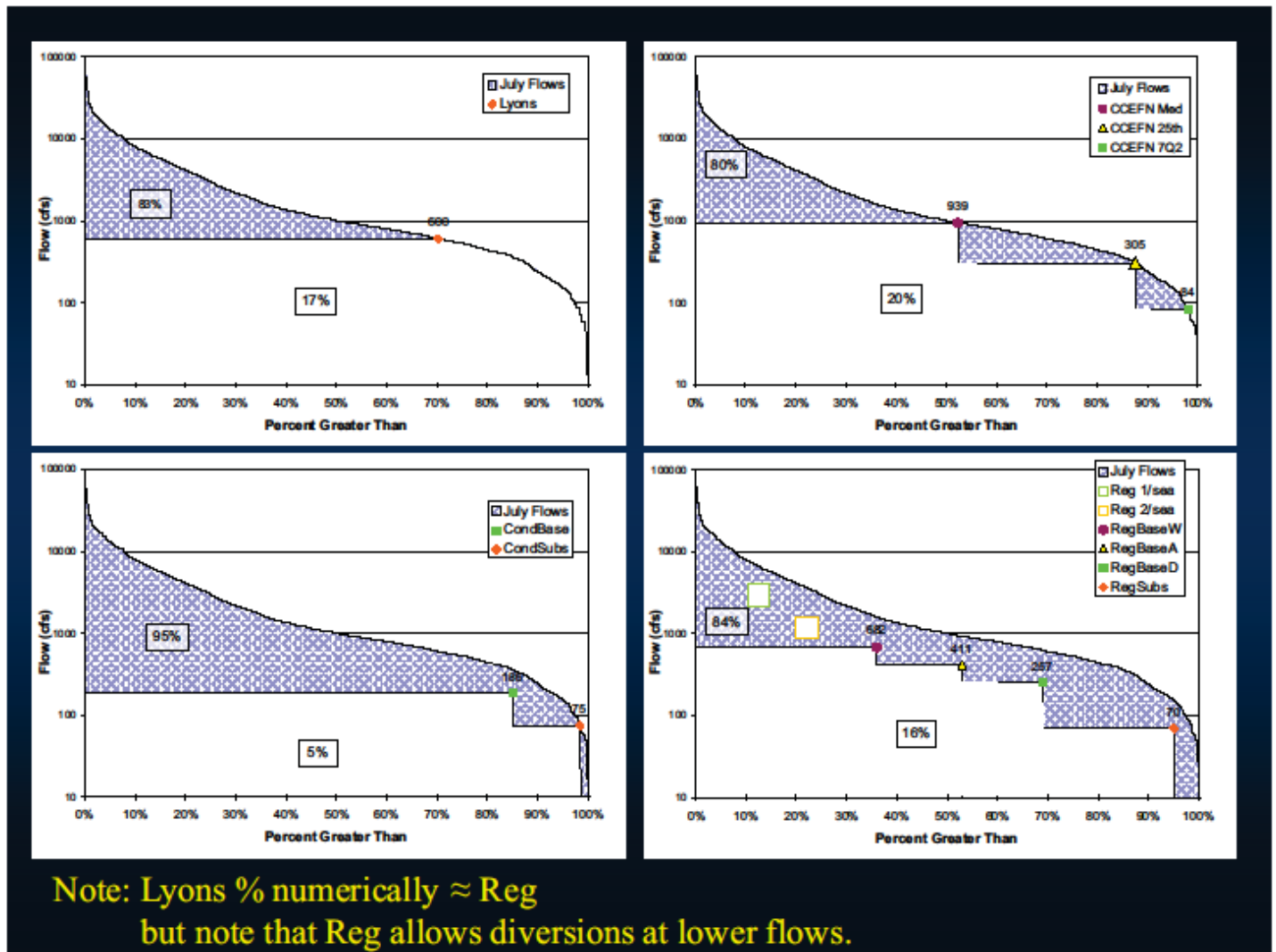
Sincerely,

A handwritten signature in black ink that reads "Myron J. Hess". The signature is written in a cursive, flowing style.

Myron J. Hess  
Manager, Texas Water Programs/Counsel

Attachment

## ATTACHMENT 1



Attachment 1 is a slide taken from a presentation by Dan Opdyke, with the Texas Parks and Wildlife Department, to the Texas Environmental Flows Science Advisory Committee on June 14, 2010. This slide depicts a summary of a comparison of water available for diversion using recommendations from the two contingents of the Trinity/San Jacinto/Galveston Bay BBEST, the Lyons Method, and the Consensus Criteria for Environmental Flow Needs.